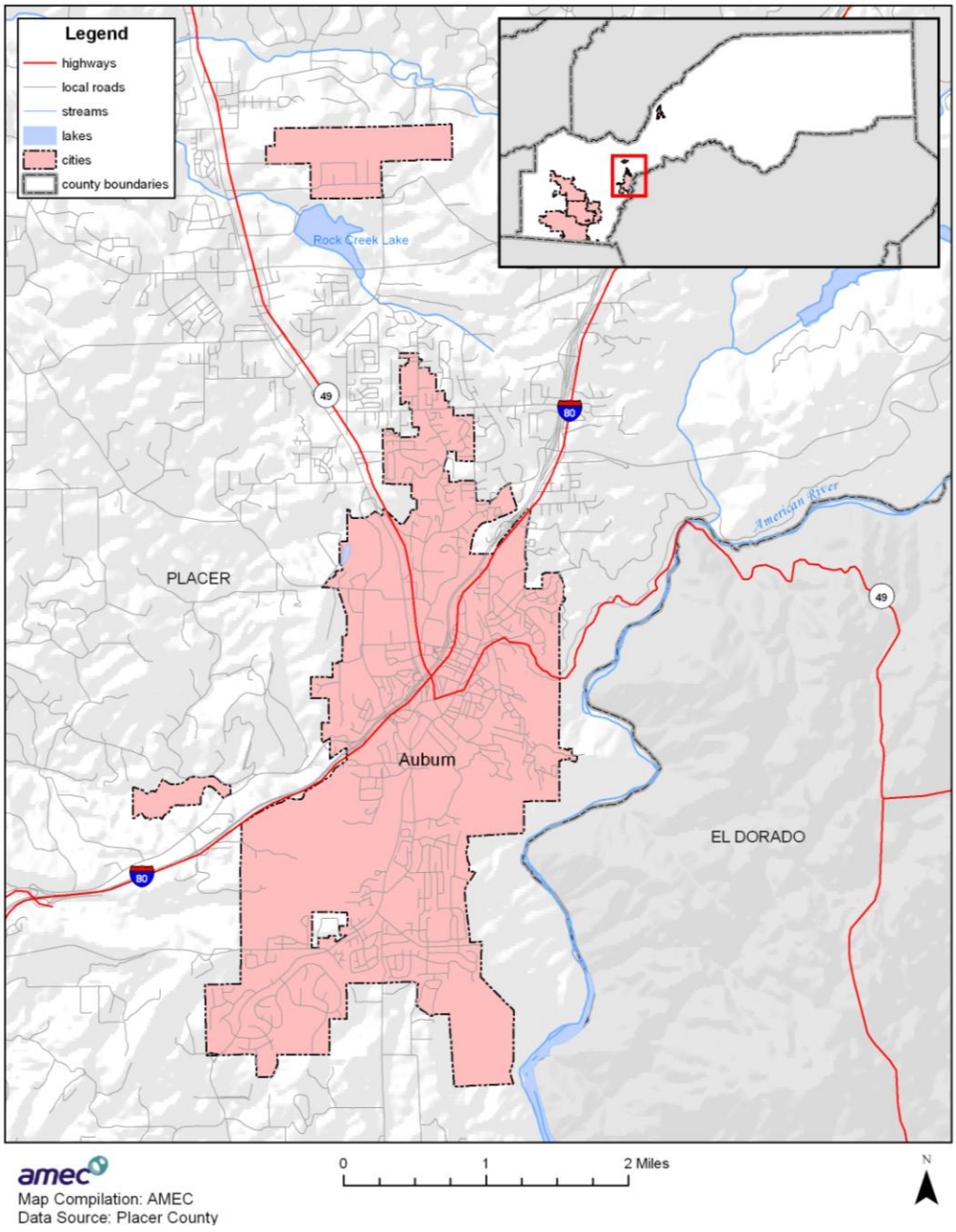
ANNEX A: CITY OF AUBURN

A.1 Community Profile

Figure A.1 displays a map and the location of the City of Auburn within Placer County.

Figure A.1. The City of Auburn



A.1.1 Geography and Climate

The City of Auburn is located on the western slope of the Sierra Nevada Range at elevations between 1,000 and 1,400 feet above mean sea level (msl). Auburn is the county seat of Placer County and is also located at the crossroads of I-80 and Highway 49. The City is about 7.5 square miles in area and rests near the confluence of the North and Middle Forks of the American River. Mountainous wilderness, canyons, and the western slope of the Sierra Nevada Range lie adjacent eastward; while gentle rolling foothills well-suited for agriculture lie to the west. The crest of the Sierra Nevada lies approximately 45 miles eastward and the Central Valley lies approximately 10 miles to the west.

Auburn consists of two distinct areas: the incorporated city and the greater Auburn area. Auburn's average temperatures ranges from the high 80°F to mid 90°F during the summer to the mid 30°F to high 40°F during the winter. Auburn receives an average of 34.47 inches of rain and 1.2 inches of snow annually.

A.1.2 History

Auburn is well known for its California gold rush history. In 1849, a mining camp became officially known as Auburn and by 1850, Auburn's population had reached 1,500 people. A Frenchman named Claude Chana first discovered gold in the Auburn Ravine in 1848. By 1849 the North Fork Dry Diggings had become a well-established mining camp. Later in the year, the camp was officially named Auburn. Because Auburn was a short distance from Sacramento, centrally located in the gold country, and located just below the snow line, it became known as the "jumping off" spot for the miners. By 1865, Auburn had developed into a permanent town, with the Central Pacific Railroad connecting people to the area. Auburn was first incorporated in 1860 and again in 1888. By 1900 the population of Auburn was just over 2,000.

A.1.3 Economy

The City's economic base consists of retail sales and services; recreational and healthcare services; and light manufacturing. Auburn owns and operates the Auburn Municipal Airport. The city encourages industrial growth through its Airport Industrial Park and light industry in other parts of the city.

Of the total labor force population, approximately 36 percent were employed as management, professional, and related occupations; while another 28 percent were employed in technical, sales, and administrative support occupations. Other common occupations were service occupations (17 percent) and precisions production, craft, and repair occupations (8 percent).

From its origins as a mining camp, Auburn has emerged as a community of strong historic character, cultural enrichment, economic diversity, and a destination point for outstanding outdoor recreation. Auburn's historic culture is being sustained by way of its museums and

antique stores and the preservation and renovation of its residences and commercial buildings. Four commercial districts provide a wide variety of shopping and dining experiences.

The nearby Auburn State Recreation Area (ASRA) and the American River Canyon support a diverse range of recreational activities from whitewater rafting and kayaking to fishing and hiking. Auburn is also home to many challenging sporting endurance events, including: Western States 100 mile Endurance Run/UltraMarathon; the Tevis Cup 100 mile equestrian ride; and the Rio Del Lago 100 mile endurance run.

A.1.4 Population

In 2008 the total population for the City of Auburn was estimated at 13,273, with over 44,000 people living in the greater Auburn area.

A.2 Hazard Identification and Summary

Auburn's planning team identified the hazards that affect the City and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to Auburn (see Table A.1). In the context of the plan's planning area, there are no hazards that are unique to Auburn.

Table A.1. City of Auburn—Hazard Summaries

Hazard	Frequency of Occurrence	Spatial Extent	Potential Magnitude	Significance
Agricultural	Unlikely	Limited	Negligible	Low
Avalanche	Unlikely	Limited	Negligible	Low
Dam Failure	Unlikely	Limited	Negligible	Low
Drought	Occasional	Limited	Limited	Low
Earthquake	Occasional	Extensive	Catastrophic	Low
Flood (100-year)	Unlikely	Limited	Negligible	Low
Flood (stormwater)	Likely	Limited	Limited	Medium
Human Health Hazards				
Endemic/Pandemic	Unlikely	Extensive	Catastrophic	Low
West Nile Virus	Occasional	Limited	Limited	Low
Landslide	Occasional	Limited	Limited	Low
Seiches	Unlikely	Limited	Limited	Low
Severe Weather:				
Extreme Cold/Freeze	Likely	Extensive	Critical	Medium
Extreme Heat	Likely	Extensive	Critical	Medium
Fog	Occasional	Extensive	Critical	Low
Snow	Occasional	Limited	Limited	Low
Tornado	Unlikely	Limited	Limited	Low
Heavy Rain/ Thunderstorm/Hail/ Lightning/Wind	Likely	Extensive	Critical	Medium/High
Soil Hazards:				
Erosion	Occasional	Limited	Limited	Low
Expansive Soils	Occasional	Limited	Limited	Low
Volcano	Unlikely	Extensive	Catastrophic	Low
Wildfire	Likely	Extensive	Catastrophic	High

Guidelines for Hazard Rankings:

Frequency of Occurrence:
Highly-Likely-Near 100 percent probability in next year
Likely-Between 10 and 100 percent probability in next year or at least one chance in ten years
Occasional-Between 1 and 10 percent probability in next year or at least one chance in next 100 years
Unlikely-Less than 1 percent probability in next 100 years

Spatial Extent:
Limited-Less than 10 percent of planning area
Significant-10-50 percent of planning area
Extensive-50-100 percent of planning area

Potential Magnitude:
Catastrophic-More than 50 percent of area affected
Critical-25 to 50 percent
Limited-10 to 25 percent
Negligible-Less than 10 percent

Significance (subjective):
Low, Medium, High

A.3 Vulnerability Assessment

The intent of this section is to assess Auburn's vulnerability separate from that of the planning area as a whole, which has already been assessed in Section 4.3 Vulnerability Assessment in the main plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area. In addition, although ranked as low significance by the community, the 100-year flood hazard is also included in the below analysis. For more information about how hazards affect the County as a whole, see Chapter 4 Risk Assessment in the main plan.

A.3.1 Assets at Risk

This section identifies Auburn's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends.

Values at Risk

The following data from the Placer County Assessor's Office is based on the certified roll values for 2007. This data should only be used as a guideline to overall values in the City as the information has some limitations. The most significant limitation is created by Proposition 13. Instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is likely low and does not reflect current market value of properties. It is also important to note that in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. Table A.2 shows the 2007 roll values (e.g., the values at risk) broken down by property type for the City of Auburn.

Table A.2. 2007 Roll Values for the City of Auburn by Property Type

Property Type	Units	Net Value
Residential	5,080	$1,319,754,382
Commercial	514	$227,597,953
Industrial	30	$11,324,407
Agricultural	32	$95,498
Total Value	5,656	$1,558,772,240

Source: 2007 Certified Roll Values, Placer County Assessor's Office

Assets directly within the City of Auburn include a range of properties and equipment from each department. These may include city-owned property, critical facilities and infrastructure, cultural and natural resources and others. An inventory of key city assets is provided in Table A.3. Total value of these assets exceeds $158 million.

Table A.3. Asset Inventory-City of Auburn

Name of Asset	Type	Replacement Value	Occupancy/ Capacity #	Hazard Specific Info.
Auburn City Emergency Operations Center	Essential Facility	1M	50	Emergency Operations/Security
Auburn Police Station	Essential Facility	6M	40	Security/Equipment
Auburn Fire Stations (3)	Essential Facility	8M	30	Equipment/Quarters
Auburn Wastewater Treatment Plant	Lifeline	30M	5	Critical Public Service
Placer High School	High Potential Loss	15M	Approx. 2000	Evacuation Center Large # of people
EV Cain Jr. High School	High Potential Loss	5M	Approx. 1000	Evacuation Center Large # of people
Elementary Schools (3)	High Potential Loss	15M	Approx. 900	Evacuation Center Large # of people
Auburn Park & Recreation Facilities	High Potential Loss	5M	1500	Evacuation Facilities/Field Support for emergencies
Auburn Airport	Transportation	9M	N/A Air transport	Aircraft facility
I80 Train Trestle	Transportation	Unknown	N/A Transportation	Critical to transportation modes
I80 Over/under passes	Transportation	Unknown	N/A Transportation	Critical to transportation modes
Dawson's Fuel Storage	Lifeline	1M	Approx. 15000 Gallons	Large amounts of fuels, liquid
Suburban Propane Storage	Lifeline	1M	Approx. 5000 Gallons	Large amounts of fuels, gas
Placer Co. Admin. Buildings	Essential Facility	20M	200	Government Business Center
Auburn Ravine Terrace	High Potential Loss	10M	400	Large Elderly Care Facility
KAHI Radio Station	Lifeline	500K	5	Regional Public Communications
Auburn City Hall	Essential Facility	6M	120	Government Business Center

Source: City of Auburn

Critical Facilities and Infrastructure

For purposes of this plan, a critical facility is defined as: "Those services and facilities necessary during a major emergency." This definition was refined by separating out three categories of critical facilities as further described in Section 4.3.1 of the base plan.

An inventory of critical facilities in the City of Auburn from Placer County GIS is provided in Tables A.4 and A.5 and illustrated in Figure A.2. Due to the volume of data, communication infrastructure points and hydrants are not mapped and are only included in the Summary Table.

Table A.4. City of Auburn's Critical Facilities: Summary Table

Facility Type	Count	Facility-Type	Count
Airports	2	Hydrants	1,535
Communication Infrastructure	47	Medical Facilities	2
Dispatch Centers	1	Police Stations	1
Emergency Operations Centers	1	Public Utilities	5
Fairgrounds	1	Public Works	1
Fire Stations	3	Schools	5
Halls	4	Train Stations	1
Hazmat Facilities	2	US Coast Guard	1
		Total:	**1,612**

Source: Placer County GIS

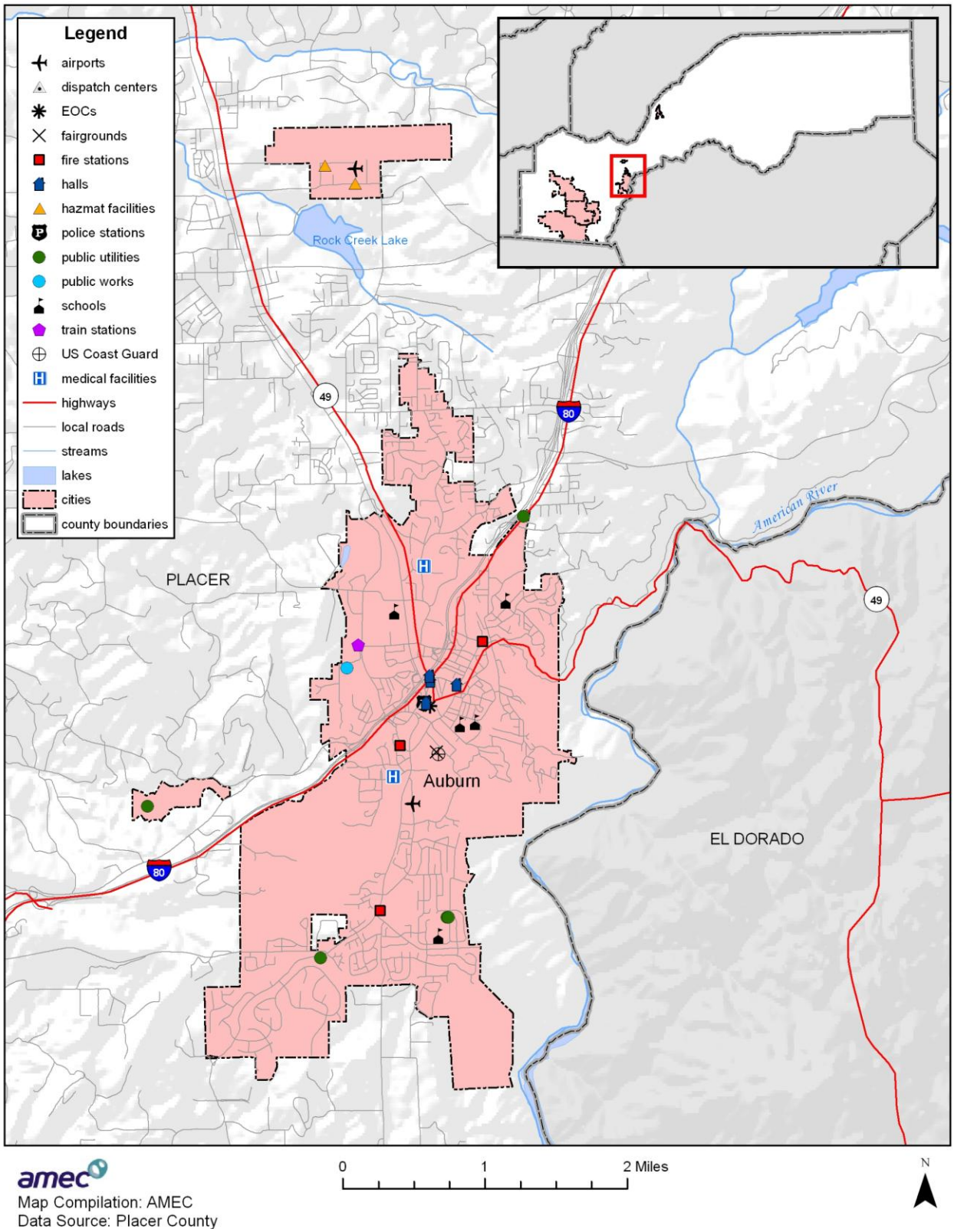
Table A.5. City of Auburn's Critical Facilities: Detailed Table

Type	Class	Name	Address
Airports	Class 2	PG&E-Auburn Service Center Heliport	255 Sacramento St.
Airports	Class 2	Auburn Municipal Airport	13626 New Airport Rd
Dispatch Centers	Class 1	Auburn Police Department	1215 Lincoln Way
Emergency Operations Centers	Class 1	City of Auburn	1215 Lincoln Wy
Fairgrounds	Class 3	Gold Country Fairgrounds	1273 High St
Fire Stations	Class 2	City Auburn Fire Protection	226 Sacramento St
Fire Stations	Class 2	City Auburn Fire Protection	901 Auburn-Folsom Rd
Fire Stations	Class 2	City Auburn Fire Protection	485 High St
Halls	Class 3	Auburn City Hall	1225 Lincoln Way
Halls	Class 3	Elks Building Hall Co Inc.	195 Pine St.
Halls	Class 3	Auburn Tahoe Club	902 1/2 Lincoln Way
Halls	Class 3	State Of California	no data
Hazmat Facilities	Class 2	Coherent Inc.	12840 Bill Clark Way
Hazmat Facilities	Class 2	Coherent Incorporated Auburn Group	2303 Lindbergh Street
Medical Facilities	Class 2	Auburn Gardens Care Center	260 Racetrack St
Medical Facilities	Class 2	Auburn Ravine Terrace	750 Auburn Ravine Rd
Police Stations	Class 3	Auburn Police	1215 Lincoln Way
Public Utilities	Class 3	Skyridge Pump Station	no data
Public Utilities	Class 3	North Auburn Pump Station	no data
Public Utilities	Class 3	Vintage Oaks 500,000 Gal. Tank	no data
Public Utilities	Class 3	Skyridge 1,000,000 Gal. Tank	no data
Public Utilities	Class 3	Auburn Wastewater Plant	10441 Ophir Rd

Type	Class	Name	Address
Public Works	Class 3	Auburn Public Works Corporation Yard	11500 Blocker Dr
Schools	Class 3	Alta Vista Elementary School	173 Oak St.
Schools	Class 3	E. V. Cain Middle School	150 Palm Ave.
Schools	Class 3	Placer High School	275 Orange St.
Schools	Class 3	Placer School for Adults	390 Finley St.
Schools	Class 3	Skyridge Elementary School	800 Perkins Way
Train Stations	Class 2	Auburn	277 Nevada St. at Fulweiler St.
US Coast Guard Facilities	Class 2	First 184th Infantry Regiment, Charlie Company	1273 High Street

Source: Placer County GIS

Figure A.2. City of Auburn's Critical Facilities



Natural Resources:

The City of Auburn has a variety of natural resources of value to the community:

- Sensitive plant communities: Oak Woodland, Riparian, and Stream habitat.
- No vernal pools are known to exist within the City limits.
- Several sensitive status species with the potential to occur: California red-legged frog, Foothill yellow-legged frog, Cooper's Hawk, sharp-skinned hawk, golden eagle, bald eagle, northern harrier, Black-Shouldered Kite, prairie falcon, long-eared owl, Pacific fisher, and valley elderberry longhorn beetle.

Historic Resources

The City of Auburn has registered federal historic sites:

- Old Auburn Historic District – Roughly bounded by Maple, Commercial, Court, Washington, Lincoln, and Sacramento Streets

In addition to the registered sites, there are several assets within Auburn that define the community and represent the City's history. Some of the historical sites of importance to Auburn are listed below.

- Auburn Joss House Museum
- Bernhard Museum Complex
- Downtown Auburn
- Historic Old Town Auburn
- Placer High School
- Placer County Museum

Economic Assets

The largest employers within the City of Auburn include the County of Placer, Placer Union High School District, Auburn Union Elementary School District, and Pride Industries.

Growth and Development Trends

Since the 2000 U.S. Census, the City of Auburn's population has grown by 5 percent. Auburn's growth rate is significantly lower than Placer County's growth which is estimated at 31 percent. In comparison to other cities in the county, Auburn has not experienced the same growth and thus has been able to retain a small town atmosphere.

The 2008 Metropolitan Transportation Plan (MTP) projects the city will grow by 29 percent between 2005 and 2035. According to projections, Auburn is expected to reach a population of 17,985 by 2035.

The number of households in the City of Auburn increased from 5,302 in 2000 to 5,731 in 2006; equating to an 8 percent increase. Since 2000, the number of households has increased at a faster rate than the City's population due to a slight decrease in the household size from 2.31 to 2.24.

The number of housing units increased from 5,302 in 2000 to 5,731 in 2006, an 8 percent increase. The City of Auburn has not experienced the same population growth and housing unit construction as experienced in the larger cities in Placer County during the first part of the decade.

Table A.6 illustrates how the City has grown in terms of population and number of housing units between 2000 and 2006/7.

Table A.6. City of Auburn's Change in Population and Housing Units, 2000-2007

2000 Population	2007 Population Estimate	Estimated Percent Change 2000-2007	2000 # of Housing Units	2006 Estimated # of Housing Units	Estimated Percent Change 2000-2006
12,462	13,112	+5%	5,302	5,731	+8%

Source: City of Auburn 2008 Housing Element/California Department of Finance, www.dof.ca.gov/Research/

Sacramento Council of Governments (SACOG) is responsible for determining future housing needs for a six county region, which includes Placer County. According to SACOG's 2008 Regional Housing Needs Plan, the City of Auburn has a total housing construction need of 307 units, which equates to an annual need of approximately 44 units for the 2006-2013 planning period. The SACOG 2035 MTP projects the number of housing units will total 7,868 by the year 2035.

The 2008 Housing Element identifies numerous areas within the City of Auburn that are in the planning stage or have been approved for development of new subdivisions. Table A.7 provides the number of lots, acreages, location, and status of residential subdivisions in the planning stages or approved by the city.

Also identified in the 2008 Housing Element is the future residential development potential within the City. The following is a description of the available vacant land in the City and the number of units that could potentially be accommodated in low, medium, and high-density districts.

- Auburn has approximately 14 acres of land, consisting of 30 small infill sites, zoned for high densities (9-15 units per acre) that could accommodate between 125 and 209 new dwelling units. This high-density zoned land is located in the City's Zoning Ordinance designation R-3. High density residential is allowed in the Central Business District (C-2) and Regional Commercial District (C-3). There are approximately 13 acres in the C-2 District that could accommodate an additional 114 to 191 multi-family units and 18 acres in the C-3 District that could accommodate and additional 156 to 259 multi-family units. High density

residential is allowed in the Neighborhood Commercial (C-1) districts with a use permit. There are 2 acres in this zone that could accommodate and additional 16-27 units.

- Auburn has approximately 27 acres of land, consisting of 29 small infill parcels, zoned for medium-densities (0 to 10 units per acre) that could accommodate between 108 to 119 new dwelling units. This medium-density zoned land is located in the City's Zoning Ordinance designation R-2 (between 6 to 10 units per acre), R1-5, R1-7, and R1-8.5.
- Auburn has approximately 309 acres of land zoned for low-densities (0 to 4 units per acre) that could accommodate up to 567 new dwelling units. These low-density zoned lands are located in the City's Zoning Ordinance designations AR, R1-10, R1-15, and R1-20.

Most of the vacant parcels scattered throughout the City are surrounded by existing development and could be classified as infill. However, due to the topography of the City vacant land could possibly have constraints that might include limited access, wetlands, native trees, and geologic constraints. Figure A.7 illustrates the locations of available vacant land in the City.

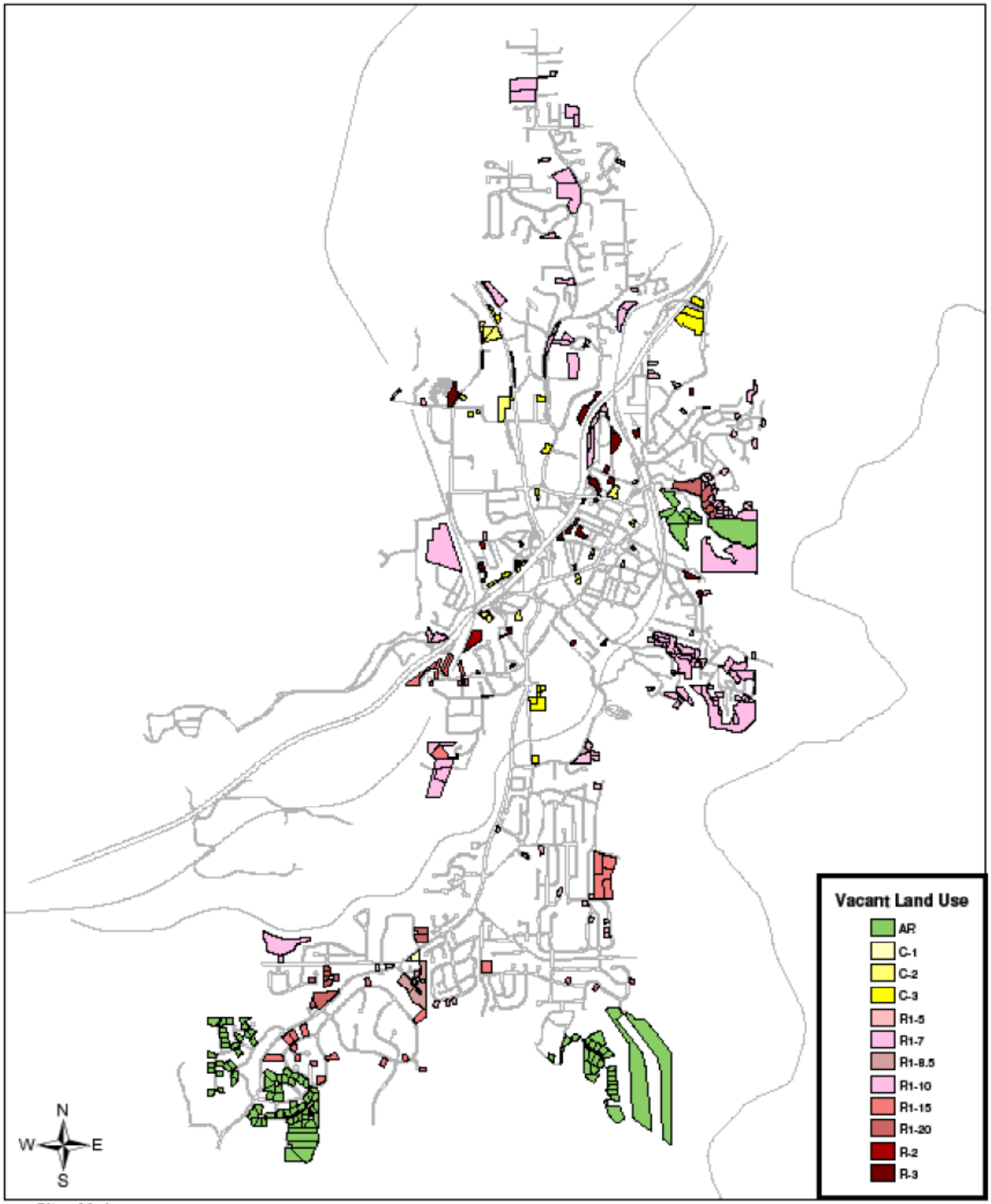
Table A.7. Auburn Residential Subdivision Status Listing

Subdivision	Lots/Units	Acres	Location	Status
In Planning				
Auburn Bluffs	29	9.6	East of Auburn Folsom Road at Indian Hill Road	Submitted 3/07; approved
Baltimore Ravine Specific Plan	±1200-1300	±264	East of Interstate 80; west of Auburn Folsom Road; north of UPRR	In the planning an environmental review process
Collins Annexation	82	27.8	Outside Auburn City limits – Southwest corner of Mt Vernon Road and Collins Drive	Submitted 2/4/05; resubmittal in review
Noble Hills	6	2.95	West of Auburn Folsom at Sunrise Ridge Circle	Submitted 1/27/06 – incomplete; awaiting resubmittal
Vist Cielo II (Annexation)	65	65.7	Outside Auburn City limits – west of terminus of Lakeridge Drive	Submitted 9/11/07 – incomplete; in review
Approved				
Auburn Bluffs Lot E (SUB 785)	20	15.5	East of Auburn Folsom Road, South of Sunrise Ridge CR	9 lots available
Canyon Creek (SUB 03-2)	24	11	406 Maidu Drive	Map approved; not recorded
Canyon Rim Estates (SUB 02-3)	23	120	Southern Terminus of Eagles Nest	20 lots available
Canyon Ridge Lane (SUB 06-2)	6	7.2	143 Borland Ave	Improvement plans in review
Diamond Ridge (SUB 760)	47	26.7	South of Indian Hill Rd, West of Santa Barbara Subdivision	1 lot available
Granite Bay Vista (SUB 758)	80	80	West of Auburn Folsom Rd, Immediately North of City Limits	30 lots available
Knollwood Lot Split (LS 04-1)	3	2.6	471 Knollwood Drive	3 lots available

Subdivision	Lots/Units	Acres	Location	Status
Monticielo (SUB 751)	63	24	Riverview Dr, North of Maidu Dr	8 lots available
The Outlook @ Indian Hill (SUB 02-2)	70	70	East of Auburn Folsom, Immediately North of City Limits	45 lots available
Southridge VI (SUB 781)	48	17.7	South End of Southridge Dr	3 lots available
Summer Ridge (SUB 05-3)	14	3.9	1101 Oakridge Way	Improvements under construction; map not recorded
Sunny Creek (SUB 06-1)	13	±4	1161 Oakridge Way	Improvements under construction; map not recorded
Vienna Woods (SUB 04-4)	24	±6	585 Dairy Road	Tentative app approved; not recorded; expires 6/21/08
View Crest Estates (SUB 02-4)	7	5	South of Indian Hill, East of Diamond Ridge Subdivision	Improvements completed; map recorded; all 7 lots available
Woodland Estates (SUB 782)	34	16	West end of High St and Clark St	14 lots available
Multi-Family				
Blackmun Duplexes	4	0.3	188 East Place Street	Submitted 11/2/06 – incomplete; in review
Gooch (Northfork) Apartments	9	0.78	195 Lincoln Way	Completed
Palm Point Condos	6	0.42	335 Placer Street	Under construction
Wall Street Condos	30	2.03	580 Wall Street	Improvement plans in place

Source: City of Auburn, January 2008.

Figure A.3 Vacant Land Inventory



More general information on growth and development in Placer County as a whole can be found in "Growth and Development Trends" in Section 4.3.1 Placer County Vulnerability and Assets at Risk of the main plan.

A.3.2 Estimating Potential Losses

Table A.2 above shows Auburn's exposure to hazards in terms of number and value of total structures. Placer County assessor's data was used to calculate the improved value of parcels. Generally, the most vulnerable structures are those in the floodplain or WUI areas, unreinforced masonry buildings, and buildings built prior to the introduction of modern building codes. Impacts of past events and vulnerability to specific hazards are further discussed below (see Section 4.1 Hazard Identification for more detailed information about these hazards and their impacts on Placer County).

Flood

Auburn is traversed by several stream systems and is at risk to both the 100-year flood as well as to localized stormwater flooding. According to the Safety Element of Auburn's General Plan, the average annual rainfall totals 35 inches, and although no major flooding is expected in the planning area, intermittent flooding and sheet wash occur along major drainage channels and adjoining areas on scattered sites. Areas with flood hazards are the natural drainage channels of the Auburn Ravine, Dutch Ravine and Rock Creek, and the tunnel section of the Auburn Ravine under Old Town. Other flood hazard areas include the numerous under-sized bridges and culverts within the Auburn/Bowman Area.

As previously described in Section 4.2.12 of the main plan, the Placer County Planning Area and the City of Auburn have been subject to historical flooding. Within the City of Auburn, much of the flood damage occurs as a result of localized stormwater flooding, with limited flood damage occurring in the 100-year and greater floodplains. Most recently, flooding occurred in December 2005/January 2006 as a result of heavy stormwater runoff caused by severe winter storms. Although actual damages were minimal, the storms impacted transit on public roads and caused some business closures due to limited access. Stormwater infrastructure also sustained limited damage.

Values at Risk

The City of Auburn provided the GIS data to reflect those parcels affected by the 100-year flood. Following the methodology described in Section 4.3.2 Vulnerability of Placer County to Specific Hazards and in Table 4.38, a flood map for the City of Auburn was created (see Figure A.4). Tables A.8-A.9 summarizes the values at risk in the City's floodplain. Table A.8 shows the count and improved value of those parcels affected by the 100-year floodplain; Table A.9 shows loss estimates.

Figure A.4. City of Auburn's 100- and 500-Year Floodplains

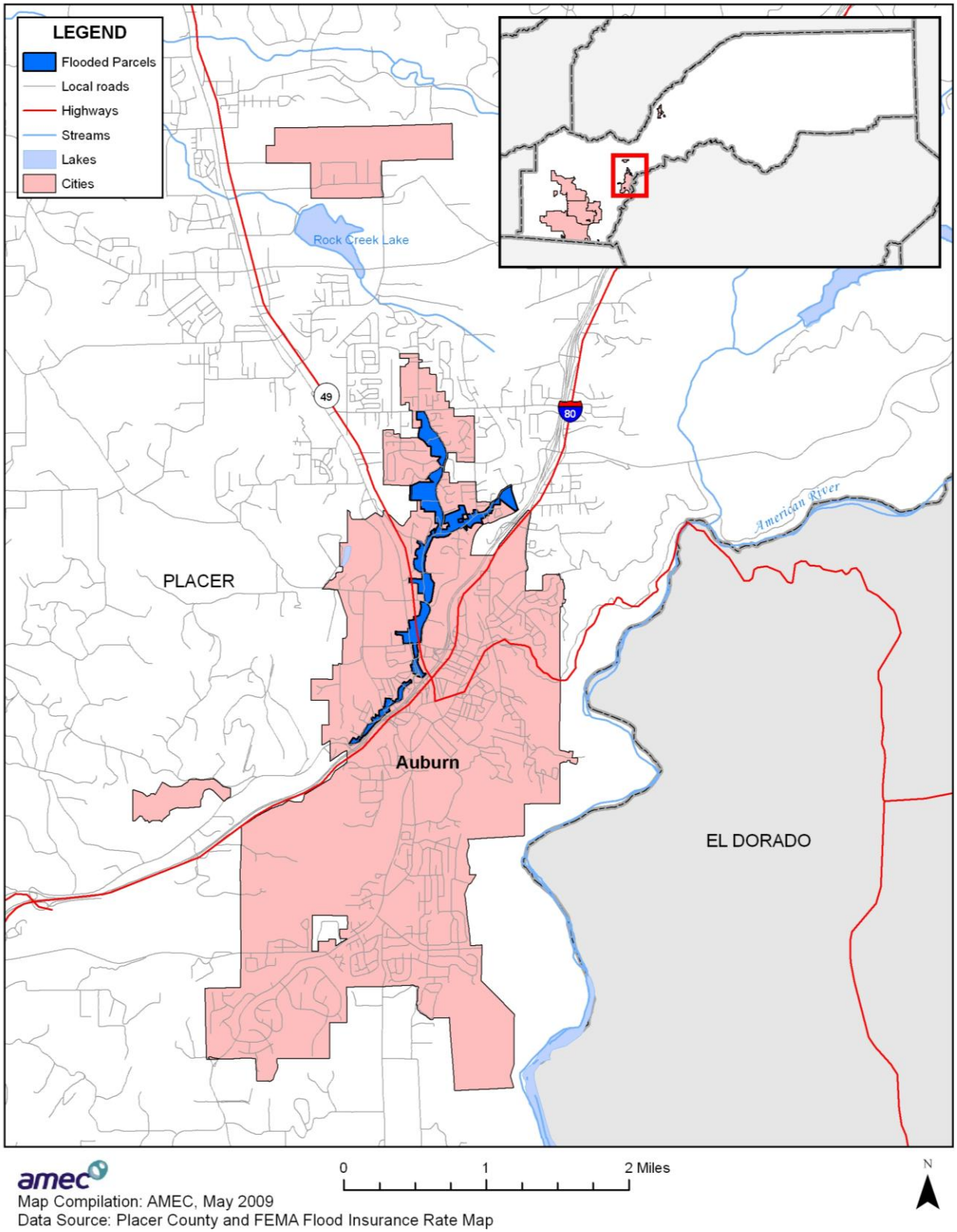


Table A.8 Count and Improved Value of Parcels Affected by 100-year Floodplain

City of Auburn		
Property Type	# of parcels	Structure Value
Agriculture	0	$0
Commercial	33	$23,076,310
Industrial	0	$0
Miscellaneous	32	$-
Open Space	2	$-
Residential	126	$20,045,161
Total	**193**	**$43,121,471**

Sources: 2007 Certified Roll Values, Placer County Assessor's Office; Digital Flood Insurance Rate Map Placer County, California and Incorporated Areas, 2007, FEMA

Table A.9 Placer County Flood Loss Estimates—City of Auburn

City of Auburn					
	total # of parcels	**structure value**	**estimated contents value**	**total value**	**loss estimate**
100-year flood	193	$43,121,471	$21,560,736	$64,682,207	$12,936,441

Sources: 2007 Certified Roll Values, Placer County Assessor's Office; Digital Flood Insurance Rate Map Placer County, California and Incorporated Areas, 2007, FEMA

Based on this analysis, the City of Auburn has substantial risk to the 100-year and greater floods. 33 commercial parcels with a value of $23,076,310 and 126 residential parcels with a value of $20,045,161 are affected by the 100-year flood.

Population at Risk

Based on information from HAZUS-MH (Census 2000) and the data provided by the City of Auburn, the following are at risk to flooding in the City of Auburn:

- 100-year flood—748 people

Critical Facilities at Risk

Critical facilities are those community components that are most needed to withstand the impacts of disaster as previously described. Based on GIS analysis, there are no critical facilities at risk in the City's 100-year floodplain.

Insurance Coverage, Claims Paid, and Repetitive Losses

The City of Auburn joined the National Flood Insurance Program (NFIP) on December 23, 1983. The City does not participate in CRS program. Table A.10 identifies the existing FIRM maps within the city limits. A more detailed description and summary of the flood zones is provided in Section 4.3.2 of the base plan in Table 4.38.

Table A.10 FIRMs for NFIP Community #06061C0—City of Auburn

Map Number	Effective Date
06061C0288F	06/08/1998
06061C0409F	06/08/1998
06061C0426F	06/08/1998
06061C0428F	06/08/1998
06061C0450F	06/08/1998

Source: FEMA

NFIP data indicates that as of October 30, 2007, there were 18 flood insurance policies in force in the City with $3,940,300 of coverage. Of the 18 policies, 14 were residential (single-family homes) and 4 were nonresidential; six of the policies were in A zones (the remaining 12 were in B, C, and X zones). The GIS parcel analysis detailed above identified 193 parcels in the 100-year flood zone. Six policies for 193 parcels in the 100-year floodplain equates to insurance coverage of 3.1 percent.

There have been 20 historical claims for flood losses totaling $489,524; all were standard policies located in B, C, or X zones. 19 of these were for pre-FIRM structures; one was for a post-FIRM structure. NFIP data further indicates that there are three repetitive loss (RL) buildings, with 2 RL buildings being insured. There have been a total of 9 RL losses, with 7 insured RL losses. One of the insured RL buildings has incurred 4 or more losses. All RL buildings are located outside of the 100- and 500-year floodplain in the B, C, or X zones. The RL properties are located in an older, built-out residential neighborhood with older infrastructure. Repetitive flooding is generally a result of a combination of poor drainage and homes with basements. Recent drainage improvements in the area may have alleviated some of the flooding issues to these RL structures.

Localized Flooding/Severe Weather Areas

Flooding and other issues caused by severe weather events, primarily heavy rains and thunderstorms, can often pose a risk to the community. Primary concerns include impacts to infrastructure that provides a means of ingress and egress throughout the community. Table A.11 identifies known and past occurrences of such areas and the associated problems encountered. This list is an initial inventory of key problem areas and is not intended to be a complete inventory of all problems and locations associated with severe weather events and localized flooding in the City of Auburn.

Table A.11. City of Auburn's Road List of Localized Flooding Problem Areas

Road Name	Flooding	Pavement Deterioration	Washout	High Water	Landslide/ Mudslide	Debris	Downed Trees
Auburn Ravine Rd.	x	x	x	x		x	x
Dairy Rd.	x	x	x	x	x	x	x

Road Name	Flooding	Pavement Deterioration	Washout	High Water	Landslide/ Mudslide	Debris	Downed Trees
Auburn Folsom	x	x	x	x	x	x	x
Old Town	x			x			
Pine Street	x			x		x	
Foresthill Ave	x	x		x		x	
Brook-Shields	x	x		x		x	
Oakwood Dr.	x			x		x	
Nevada-Andrews St.	x			x		x	
Placer St.	x		x	x		x	x
E. Lincoln Way-Alta Vista School Area	x			x		x	
Upper Sacramento St.	x			x		x	
Sutton Place	x			x		x	
Agard Street	x			x		x	
Gold Street	x			x		x	

Source: City of Auburn

Severe Weather: Extreme Temperatures

Temperature extremes, whether extreme heat or extreme cold/freezing temperatures do generally occur on an annual basis in Auburn.

Extreme Heat

From late spring through fall, it is not unusual for temperatures to exceed 90°F and higher. The following highlights were taken from the Auburn Weather Station for the period of record from 1905 to 2008:

- Record daily extremes include:
  - May – 102°F (1910)
  - June – 110°F (1925)
  - July – 113°F (1972)
  - August – 111°F (1978)
  - September – 109°F (1950)
  - October – 104°F (1928)

- Average number of days in a month exceeding 90°F:
  - April - .1 days
  - May – 2.9 days
  - June – 10.7 days
  - July 22.5 days

- August – 20.8 days
- September – 11.2 days
- October – 2.1 days

This equates to an average of 70.3 days annually in excess of 90°F.

Extreme Cold/Freeze

From late fall through spring it is not unusual for temperatures go below 32°F. The following highlights were taken from the Auburn Weather Station for the period of record from 1905 to 2009.

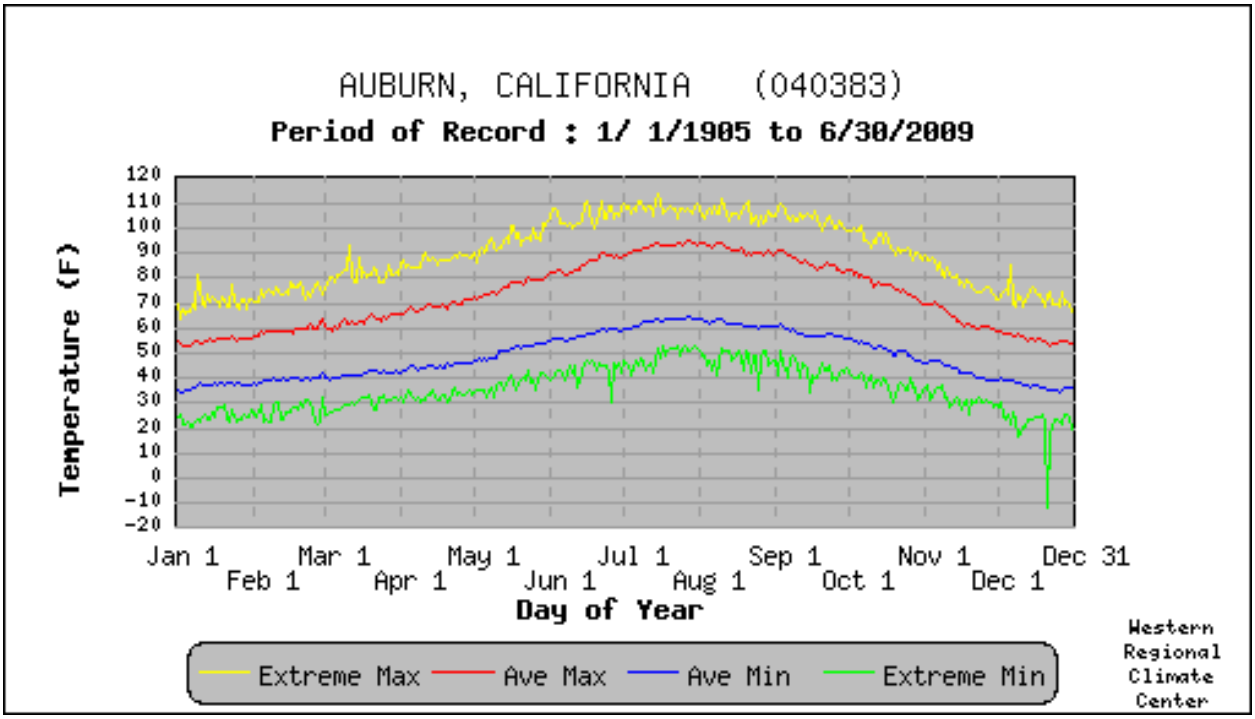
- Record daily extremes include:
  - October – 26°F (1922)
  - November – 20°F (1931)
  - December– 16°F (1972)
  - January – 17°F (1930)
  - February – 21°F (1962)
  - March – 20°F (1938)
  - April – 25°F (1929)
  - May - 25°F (1933)
  - June - 30°F (1905)

- Average number of days in a month falling below 32°F:
  - October – .1 days
  - November – 1.2 days
  - December – 7.5 days
  - January – 9.1 days
  - February – 3.7 days
  - March – 1.8 days
  - April - .5 days

This equates to an average of 24 days annually below 32°F.

Figure A.5. illustrates historical temperatures in Auburn.

Figure A.5. Historical Temperatures in Auburn



- Extreme Max. is the maximum of all daily maximum temperatures recorded for the day of the year.
- Ave. Max. is the average of all daily maximum temperatures recorded for the day of the year.
- Ave. Min. is the average of all daily minimum temperatures recorded for the day of the year.
- Extreme Min. is the minimum of all daily minimum temperatures recorded for the day of the year.

Severe Weather: Extreme Cold/Freeze

In the past the City of Auburn has experienced severe cold/freeze temperatures over several consecutive days. Impact to such cold temperatures has resulted in damage to such infrastructure as; domestic water pipes, irrigation systems, unprotected fire protection systems (fire sprinklers) and surface icing on streets and walkways. Extreme temperatures do occur on occasion resulting in the facilitation of "cooling centers" as set forth in the Placer County Heat Emergency Plan. The fairgrounds and Auburn-Placer Library located within the City are identified "cooling centers".

Severe Weather: Heavy Rain/Thunderstorm/Hail/Lightning

According to historical hazard data, severe weather is an annual occurrence in the City of Auburn. Damage and disaster declarations related to severe weather have occurred and will continue to occur in the future. Heavy rain and thunderstorms are the most frequent type of severe weather occurrence in the area. Wind and lightning often accompany these storms and have caused damage in the past. Problems associated with the primary effects of severe weather

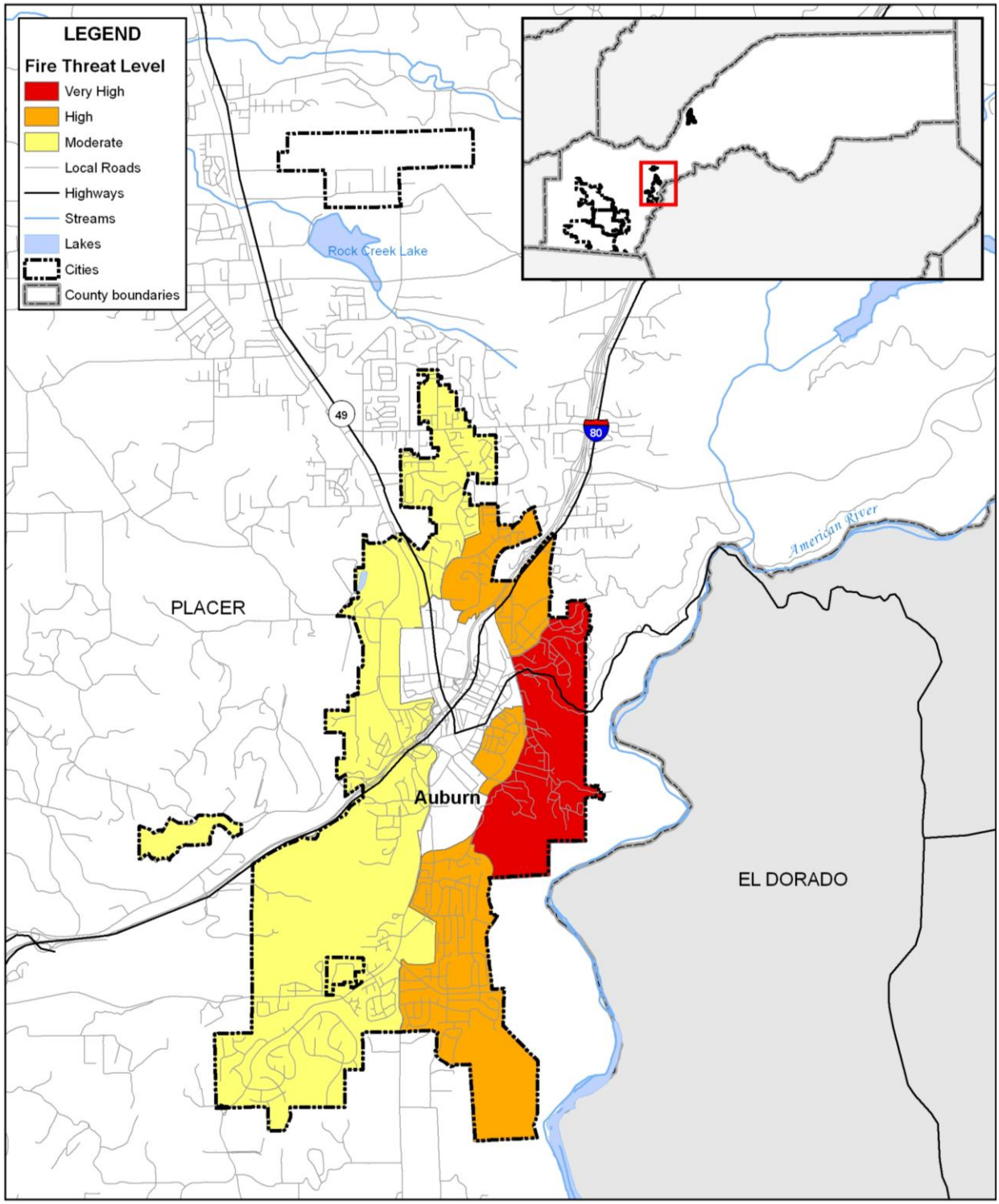
include flooding, pavement deterioration, washouts, high water crossings, landslide/mudslides, debris flows, and downed trees. Table A.11 presented above in the discussion of the flood hazard details those areas within the City that are most often affected during these heavy storm events.

Wildfire

Three types of fires are of concern to the City of Auburn: wildland, wildland urban interface, and, to a lesser extent, structural fires. According to the Safety Element of Auburn's General Plan, wildland and urban interface fires have occurred close to or encroached into the City, especially in the heavily fueled areas to the east and south. Urban structural fires have been due largely to human accidents, with are the older buildings in the City business districts the most vulnerable.

Following the methodology described in Section 4.3.2 Vulnerability of Placer County to Specific Hazards, a wildfire map for the City of Auburn was created (see Figure A.6). Wildfire threat within the city ranges from moderate to very high. The highest threat occurs along the eastern edge of the city.

Figure A.6 City of Auburn's Wildfire Threat



Values at Risk

Once the number of parcels and their values were determined, contents values were estimated (based on 50 percent of the assessed value) to determine total values at risk by hazard zone. Overlaying the fire hazard severity zone data (provided by the City of Auburn) with the County parcel layer, it is evident that the City of Auburn has significant assets at risk to wildfire as detailed in Tables A.12-A.13. Of the 6,128 total parcels, 1,154 or 19 percent are unimproved and thus do not have structures that would be damaged.

Table A.12. Values at Risk from Wildfire by Fire Hazard Severity Zone—City of Auburn

	No Rating		Moderate		High		Very High	
Property Type	# of parcels	structure value	# of parcels	structure value	# of parcels	structure value	# of parcels	structure value
Agriculture	-	$0	1	-	-	-	-	-
Commercial	288	$135,854,648	184	$63,525,325	38	$21,508,043	6	$697,373
Industrial	6	$1,005,979	12	$4,550,779	2	$43,860	13	$1,232,478
Miscellaneous	107	$1,872,911	300	$78,092	143	$51,196	207	$0
Open Space	3	$0	7	$0	3	$0	11	$0
Residential	467	$98,315,175	2,111	$462,128,254	1,686	$394,282,180	533	$79,860,391
Total	**871**	**$237,048,713**	**2,615**	**$530,282,450**	**1,872**	**$415,885,279**	**770**	**$81,790,242**

Source: Placer County Assessor/GIS/City of Auburn

Table A.13. Total Values at Risk from Wildfire—City of Auburn

	City of Auburn			
	# of parcels	structure value	estimated contents value	total value
No rating	871	$237,048,713	$118,524,357	$355,573,070
Moderate	2,615	$530,282,450	$265,141,225	$795,423,675
High	1,872	$415,885,279	$207,942,640	$623,827,919
Very high	770	$81,790,242	$40,895,121	$122,685,363
Total	**6,128**	**$1,265,006,684**	**$632,503,342**	**$1,897,510,026**

Source: Placer County Assessor/GIS/City of Auburn

Populations at Risk

Wildfire risk is of greatest concern to populations residing in the moderate, high, and very high fire severity hazard zones. Following the methodology described in Section 4.3.2 Vulnerability of Placer County to Specific Hazards, Table A.14 provides an estimate of populations residing within the various fire hazard severity zones.

Table A.14. Populations at Risk to Wildfire: Placer County Planning Area

	Wildfire Threat Level			
	No risk	moderate	high	very high
Auburn	1,506	4,367	3,816	1,174

Source: Placer County GIS/City of Auburn/Census 2000

Critical Facilities at Risk

Critical facilities are those community components that are most needed to withstand the impacts of disaster as previously described. Table A.15 lists critical facilities in the City's high fire hazard zone. There are no critical facilities in the very high hazard zone, and seven critical facilities are located in the high hazard zone. The impact to the community could be great if these critical facilities are damaged or destroyed during a wildfire.

Table A.15. Critical Facilities in the High Wildfire Hazard Zones: City of Auburn

High Hazard Wildfire- AUBURN		
Type	*Class*	*Facility*
School	Class 3	Alta Vista Elementary School
School	Class 3	Placer High School
School	Class 3	Placer School for Adults
School	Class 3	Skyridge Elementary School
Public Utility	Class 3	Skyridge Pump Station
Public Utility	Class 3	North Auburn Pump Station
Public Utility	Class 3	Skyridge 1,000,000 Gal. Tank

Source: Placer County GIS/City of Auburn

Other Hazards

Although ranked of lower planning significance relative to other hazards, the following information about drought, earthquake and geologic hazards, specifically landslides, rockslides, and erosion should still be noted:

Drought

In 1988, 45 California counties experienced water shortages that adversely affected about 30 percent of the state's population, much of the dry farmed agriculture, and over 40 percent of the irrigated agriculture. Fish and wildlife resources suffered, recreational use of lakes and rivers decreased, forestry losses and fires increased, and hydroelectric power production decreased. Since 1976, Auburn has experienced one federal declaration for drought and two local drought emergencies within Placer County. During this time, there was one U.S. Department of Agriculture declaration for crop losses associated with drought.

Earthquake

Placer County is traversed by a series of northwest trending-faults that are related to the Sierra Nevada uplift. According to the Safety Element of Auburn's General Plan, the City of Auburn is located in a seismically active region, and there is a high potential that the area will be subject to at least moderate earthquake shaking one or more times over the next century. It states further that the closest identified 'potentially active' faults are the Bear Mountain and the Melones Faults, which are situated approximately three to four miles westerly and easterly from Auburn

respectively. Earthquakes on these faults would have the greatest potential for damaging buildings in Auburn, especially the unreinforced masonry structures in the older part of the city and structures built before 1960 without adequate anchorage of framing and foundations. According to the City, there are 39 commercial buildings that are known to be constructed of unreinforced masonry.

The closest identified active fault is the Cleveland Hills fault, situated approximately 36 miles northwesterly of Auburn. It was the source of the 1975 Oroville earthquake (Richter Magnitude: 5.7). Another potential earthquake source is the Midland Fault Zone to the west, where an 1892 earthquake centered between Vacaville and Winters caused minor damage in nearby Lincoln.

Additionally, Auburn may experience minor ground shaking from distant major to great earthquakes on faults to the west and east. For example, to the west, both the San Andreas fault (source of the 8.0 estimated Richter magnitude San Francisco earthquake that damaged Sacramento in 1906) and the closer Hayward fault have the potential for experiencing major to great events. To the east in Nevada, the several faults associated with a series of earthquakes in 1954, especially the major (7.1 Richter magnitude) December 16, 1954 Fairview Peak event (about 100 miles east of Carson City), could cause minor ground shaking in Auburn.

Geologic Hazards: Landslides, Rockfalls, Erosion

According to the Safety Element, in addition to earthquake hazards, geologic hazards within the area of Auburn are small slumps, block slides, landslides and erosion gullying. The City also has steep slopes on its eastern edges, with unstable slopes, and areas subject to erosion and landslide. Increased urbanization on the hillsides exposes the community to possible landslides and rockslides, which may result in human injury and property damage. However, no injuries to people or property damage have been identified within the City of Colfax.

A.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

A.4.1 Regulatory Mitigation Capabilities

Table A.16 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the City of Auburn.

Table A.16. City of Auburn's Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Y/N	Comments
General plan	Yes	
Zoning ordinance	Yes	
Subdivision ordinance	Yes	
Growth management ordinance	No	
Floodplain ordinance	Yes	
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	Fire Safe Standards in the Wildland Urban Interface (Bates Bill, AB 337): Includes, Class A Roofing Standards, Fire Hazard Severity Zones, and Fire Safe Standards
Building code	Yes	Version: Adopted 2007 CBC (Dec 2007)
BCEGS Rating	No	
Fire department ISO rating	Yes	Rating: 4
Erosion or sediment control program	Yes	
Stormwater management program	Yes	
Site plan review requirements	Yes	Performed by each city department
Capital improvements plan	Yes	
Economic development plan	Yes	Through the Economic Development Committee
Local emergency operations plan	Yes	
Other special plans	Yes	Included in EOP
Flood insurance study or other engineering study for streams	Yes	Not yet fully integrated with GIS
Elevation certificates	Yes	Not yet fully integrated with GIS
Other		

Source: City of Auburn

The City of Auburn General Plan Program, 1993

The City of Auburn General Plan Program serves as the blueprint for future growth and development and provides comprehensive planning for the future. It encompasses what the City is now, and what it intends to be, and provides the overall framework of how to achieve this future condition (see the discussion in Section 4.3.1 Growth and Development Trends).

The General Plan includes a Safety Element that focuses on safety issues to be considered in planning for the present and future development of the Auburn Planning Area. Identified hazards include wildfire, geologic/seismic, flooding, and other natural and man-made hazards. Mitigation-related goals, are presented below.

	Safety Element Goals
Goal 1	Protect the citizens and visitors of the Auburn area from loss of life while protecting property and

	Safety Element Goals
	watershed resources from unwanted fires through preplanning, education, fire defense improvements, and fire suppression.
Goal 2	Protect the lives and property of the citizens of the Auburn area from unacceptable risk resulting from flood hazards.
Goal 3	Minimize hazards to public health, safety, and welfare resulting from natural and man-made hazards.
Goal 4	Protect all residents from hazardous materials and the hazards associated with transport of such materials.
Goal 5	Maintain and enhance City emergency services.

City of Auburn Emergency Operations Plan

The City of Auburn Emergency Operations Plan (EOP) addresses the planned response for the City of Auburn to emergencies associated with disasters, technological incidents, or other dangerous conditions created by either man or nature. It provides an overview of operational concepts, identifies components of the City emergency management organization, and describes the overall responsibilities of local, state, and federal entities. The Emergency Operations Plan includes such plans as: Terrorism Contingency Plan, Airport Response Plan, Hazardous Materials Response Plan, Wildfire Response Plan, Community Wildfire Protection Plan, Greater Auburn Area Fire Safe Council Strategic Fire Safe Plan, I-80 Transportation Infrastructure Contingency Plan, Heat Emergency Plan, Wastewater Treatment Plant Emergency Response Plan, and Stormwater Pollution Prevention Plan (3 separate plans).

A.4.2 Administrative/Technical Mitigation Capabilities

Table A.17 identifies the City department(s) responsible for activities related to mitigation and loss prevention in Auburn.

Table A.17. City of Auburn's Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position	Comments
Planner/Engineer with knowledge of land development/land management practices	Yes	Community Development Dept.	
Engineer/Professional trained in construction practices related to buildings and/or infrastructure	Yes	Public Dept. and Public Works Dept.	
Planner/Engineer/Scientist with an understanding of natural hazards	Yes	Public Works Dept.	
Personnel skilled in GIS	Yes	Administrative Services	
Full time building official	Yes	Community Development Dept.	
Floodplain Manager	Yes	Public Works Dept.	
Emergency Manager	Yes	City Manager's Office/Police Dept.	
Grant writer	Yes	Not Assigned	Various Individuals throughout the City Staff
Other personnel			
GIS Data – Hazard areas	Yes	Administrative Services, input from various depts.	
GIS Data - Critical facilities	Yes	Administrative Services, input from ESC	
GIS Data – Building footprints	No		
GIS Data – Land use	Yes	Administrative Services, input from Community Development	
GIS Data – Links to Assessor's data	Yes	Administrative Services	
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	Yes	Police Dispatch & Administrative Services, & ESC.	
Other			

Source: City of Auburn

A.4.3 Fiscal Mitigation Capabilities

Table A.18 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.

Table A.18. City of Auburn's Fiscal Mitigation Capabilities

Financial Resources	Accessible/Eligible to Use (Yes/No)
Community Development Block Grants	Yes

Financial Resources	Accessible/Eligible to Use (Yes/No)
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	Yes
Withhold spending in hazard prone areas	No

Source: City of Auburn

A.4.4 Mitigation Outreach and Partnerships

The City of Auburn has Public Awareness and information programs continually throughout the year specific to emergency preparedness that include: "Open Houses", media publications, community events; "Town Hall Meetings," Fairs, "Fire Prevention Week," and "Family Night Out."

A.4.5 Other Mitigation Efforts

The City of Auburn has many other ongoing mitigation efforts that include the following:

Code Adoption

- Adopted the 2007 California Building Code, Mechanical Code, Electrical Code, Plumbing Code, 2006 International Existing Building Code, and 2006 International Property Maintenance Code
- Adopted the 2007 California Fire Code

Municipal Code

- Amended to include Code adoption(s) of which included:
  - Class A Roofing Standards
  - Fire Hazard Severity Zones
  - Fire Safe Standards

- The City of Auburn has instituted new fire safe and building requirements in the City. Materials such as checklists, FAQ's, and Conditions and Requirements for Development, are made available to the public through website access and hand-outs at City facilities.
- The "Shaded Fuel Break" fuel modification project is implemented and continually evaluated as described in the *2002 Shaded Fuel Break Project, American River Canyon Implementation Program.*

- "Fire Plans for Development" are required for all new development within the City of Auburn. Such fire plans address the mitigation measures implemented to reduce potential damage and threat of wildfire. In addition, the fire plan describes the long term application and implementation of such measures that include responsibilities, funding, and evaluation.
- Annually, physical inspections are made by fire department personnel for defensible space and fuel modification on residences throughout the City of Auburn. Specific areas are concentrated on each year.
- Development and implementation of the Stormwater Treatment Plan continues.
- Progress continues to database all pertinent information into the City of Auburn GIS to beaccessible at all times, all locations.
- The Greater Auburn Area Fire Safe Council was enhanced/expanded to include surrounding fire districts and areas of wildfire concern.
- The Greater Auburn Area Fire Safe Council was instrumental in developing the Greater Auburn Area Fire Safe Plan.
- The Greater Auburn Area Fire Safe Council participated in the development of the Community Wildfire Protection Plan.
- The City of Auburn is signatory and participates in the Western Placer County Fire Chief's Automatic Response Agreement and Operations Plan for Placer County.
- Several existing "open space" areas within the City of Auburn have been "fire planned" that includes fuel modification projects to reduce the exposure of wildfire.
- Prior to the storm season, physical inspections of waterways and the storm drain system are completed and then cleaned and cleared as necessary
- Prior to a storm warning, storm drains and waterways are inspected and cleaned as necessary
- Prior to a storm warning, Public Works crews prepare sand bags in preparation for possible flooding activities

A.5 Mitigation Strategy

A.5.1 Mitigation Goals and Objectives

The City of Auburn adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

A.5.2 NFIP Mitigation Strategy

The City of Auburn actively participates with the County of Placer to address local NFIP and CRS issues through a regional approach. Many of the program activities are the same for the City of Auburn as for Placer County since participation at the County level includes all local jurisdictions. An elected official of the City of Auburn is a designated representative on the Placer County Flood Control District Board. (Refer to the County section of the Plan for detailed information).

At the local level, the City administers floodplain regulations that meet the minimum requirements of the NFIP. The City's Municipal Code has a Flood Damage Prevention Section under the Zoning Ordinance that regulates construction in the floodplain. The City intends to continue to implement the ordinance and participate at the regional level with Placer County implementing appropriate measures to mitigate exposure and damages within designated flood prone areas.

A.5.2 Mitigation Actions

The planning team for the City of Auburn identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included.

1. GIS Based Mapping of Pertinent Information That Can Be Used By All Agencies In the Development of Pre-Planning And During Emergency Incidents

Issue/Background Statement: The City of Auburn continues the process of creating a GIS based mapping system that provides information of various infrastructure as well as systems and areas that are of benefit in pre-planning for emergencies. Some of these include: water system, sewer system, storm water system, Fire Hazard zones, Fire evacuation areas, Fire response areas, fire hydrant locations and flow information, Police response zones, street names and addresses, Zoning information, and property ownership.

Other Alternatives: Rely on established outdated maps primarily based on non GIS and GPS data.

Existing Planning Mechanisms through which Action Will be Implemented:

Responsible Office: City of Auburn Public Works and Information Technology Departments.

Priority (H, M, L): High

Cost Estimate: An estimated $50,000 would provide the software, hardware, and ability to obtain necessary information to begin to assemble and maintain a viable program to accomplish the needs for the City of Auburn.

Benefits (Losses Avoided): Identification of critical infrastructure and use in pre-planning for emergencies would be the greatest benefit. A GIS system is most cost effective in maintenance and updating since it will only require data entry once an already established system. Such a system could also interface with other regional agencies and provide easy access for critical information sharing.

Potential Funding: Potential grant funding is the only known source to accomplish this.

Schedule: On going; information will continue to be gathered and processed as staffing and systems allow.

2. Community Education on Wildfire

Issue/Background Statement: The Greater Auburn Area Fire Safe Council (GAAFSC) continues to develop programs that will provide education to the citizens of the community about wildfire devastation and responsibilities of the homeowner in creating a fire safe area around the home. The focus of this issue the GAAFSC is intending to capture is that wildfire and prevention is everyone's responsibility, not just the fire department or governmental agencies.

Other Alternatives: No similar alternatives exist.

Existing Planning Mechanisms through which Action Will be Implemented: This is identified in the Greater Auburn Area Strategic Fire Safe Plan.

Responsible Office: Greater Auburn Area Fire Safe Council

Priority (H, M, L): High

Cost Estimate: Approximately $1,000 - $2,000 is needed annually to continue this type of task. Such costs are for mailings, printed materials, and handouts.

Benefits (Losses Avoided): Educating the citizens of the community in the understanding of the importance in reducing potential fire damage due to wildfire and motivating individuals to take action will reduce the possibility of wildfire destruction and lessen the damages of those fires that do occur. A very small investment in education can result in the protection of large value resources.

Potential Funding: Grant funding has and continues to be used. However, such funding resources continue to be scarce and new avenues/areas will be evaluated and application for funding will be on-going.

Schedule: The GAAFSC intends to conduct a major community campaign event at least annually.

3. GIS Mapping of Flood Zones within the City.

Issue/Background Statement: Over 125 parcels have been identified within the City of Auburn that are located in a flood zone. The intent of this project is to take available information pertaining to flood zones and create a data base with map overlays of all those properties within such flood zones. Such areas as the 100- and 500-year flood zones can be identified.

Other Alternatives: Rely on existing FEMA paper maps.

Existing Planning Mechanisms through which Action Will be Implemented: Flood Management and identification.

Responsible Office: Public Works, Engineering Department.

Priority (H, M, L): High

Cost Estimate: Unable to determine, will depend on reliable information and staff time to process data.

Benefits (Losses Avoided): Identification for pre-planning and conditioning of development and emergency situations in flood prone areas.

Potential Funding: Budget funding, grant funding.

Schedule: Ongoing to keep accurate information. Initial data and overlay to be completed within 1-2 years.

4. Lincoln Basin (Downtown) Drainage Infrastructure

Issue/Background Statement: The Lincoln Basin drainage infrastructure project began out of evidence that the large metal drainage pipe running through downtown Auburn begun to fail along portions of its length. The Lincoln Basin drainage system collects from two different watershed basins. Currently the watershed collects from the Lincoln Basin which includes Electric Street and Hoffman Avenue and flows into a storm drain pipe. The water then connects to the Brewery Lane Basin drainage system in Old Town Auburn. The drainage infrastructure is estimated to be over 100 years old. The water from Electric Street and Lincoln Way travel in 36" – 48" corrugated metal pipe (CMP) that has deteriorated in places along Lincoln Way for approximately ¾ of a mile. Many buildings were built directly on top of the storm drain infrastructure and the City expects some possible depressions in parking lots and possible building subsidence due to the deterioration of the pipe and the back fill collapsing in.

The City of Auburn has responded to some isolated failures with the most recent occurring January 2007 at the Auburn Journal building along Lincoln Way. The other most significant isolated failure was on East Placer Street in January 1995 when a 42" CMP storm drain collapsed when a garbage truck fell through the pavement.

Other Alternatives: Don't fully implement the replacement of the failing infrastructure and continue only to do spot repairs as needed.

Existing Planning Mechanisms through which Action Will be Implemented: Identified in past budget proposals but not funded. This item has been brought to delegates in Washington D.C. in an attempt to secure funding.

Responsible Office: City of Auburn Public Works Director

Priority (H, M, L): High

Cost Estimate: This project is estimated at approximately $2,000,000 to study the site and replace the necessary infrastructure. There is no funding dedicated for this project, all funding will come from the general fund and generated sources. Grant funding can provide a valuable source of funding for this program.

Benefits (Losses Avoided): Reduction of flood related damage and structural damage to historical building in Auburn. It is estimated that this project could eliminate millions of dollars worth of damage from a collapse of the pipe or a storm system with significant rainfall.

Potential Funding: Will need to seek assistance through either grant or public funding. Current repair(s) funded through General Fund revenues.

Schedule: Identification of project only at this time. Currently awaiting funding source.

5. Creek and Stream Cleaning and Maintenance Program.

Issue/Background Statement: Within the City of Auburn exist numerous small creeks and seasonal stream areas serving as a means of natural water drainage during periods of precipitation. Some of these creeks and streams are prone to overflow due to increased capacity needed at peak times and therefore pose risk of flooding and damage to property; both private and public. A recommended mitigation measure to potential flooding in these areas is to establish an initial treatment of cleaning the creeks and streams by way of removing overgrown vegetation and debris. In addition, establish an annual maintenance procedure prioritizing the most prone areas where additional work is completed annually to eliminate localized flooding.

Other Alternatives: Rely on existing procedures of clean-up only after such a flooding occasion occurs.

Existing Planning Mechanisms through which Action Will be Implemented: Flood Management and identification as in the Storm Water Plan.

Responsible Office: Public Works, Engineering Department.

Priority (H, M, L): High

Cost Estimate: Unable to determine, will depend on analysis of personnel and equipment needed. Initial treatment to be where most cost will occur. Ongoing maintenance can be established through budget funding.

Benefits (Losses Avoided): Mitigation of potential flooding causing damage to persons and property; both private and public.

Potential Funding: Grant funding, budget funding.

Schedule: No established schedule due to lack of funding. Currently performed in emergency situations as needed.

6. American River Canyon Shaded Fuel Break

Issue/Background Statement: The City of Auburn, with high-density residential development, is bounded on the east and south by the Auburn State Recreation Area (ARSA) in the American River Canyon. The fire hazard in the ARSA and nearby private lands is rated as Very High by CAL FIRE. The ASRA property is owned by Bureau of Reclamation and is leased by California State Parks & Recreation. A shaded fuel break along the canyon rim has been designed as part of the multi-jurisdictional "Comprehensive Fire Management Plan for the Auburn State Recreation Area" (AKA "the Canyon lands Plan"). The fuel break crosses public lands as well as private lands within the City of Auburn. The public lands portion of the fuel break has been funded by BOR with CAL FIRE crews doing the work. A shaded fuel break in this area will help to reduce the potential of wildfire, and lessen the damages of any fires that do occur. It will lessen the chance of fire spreading from the private lands to the public lands and vice-versa, thus increasing community protection as well as public lands protection. The outreach included in the project will inform residents in the fuel break area about the importance of creating and maintaining defensible space, leading to behavioral changes to further improve community safety in the region. Fuel break work on the private lands started in 2003 and is being performed using the prescription specified in the Auburn City Fire Department's "American River Canyon Shaded Fuel Break Project Implementation Program June 2002," which was developed in concert with the Canyon lands Plan. The private lands comprise approximately 120 parcels, or 80-100 total acres. The ongoing maintenance of the private lands portion of the fuel break is covered in a separate Recommended Mitigation Action Form. Most recently the Bureau of Reclamation terminated a long standing contractual agreement with CAL FIRE for fire suppression and fuels management. The responsibility of implementing and maintaining this shaded fuel break on public lands falls entirely with the Bureau of Reclamation.

Other Alternatives: Historically, relying on private landowners to fund and perform vegetation reduction is overwhelming and the years of fuel buildup has resulted in an intense build up of vegetation, rather than a decrease on private lands. On public lands, private citizens have no right or access to conduct fuels management in an effort to protect their own resources. The only alternative is for each property owner, private and public, to take responsibility for project implementation on each respective land.

Existing Planning Mechanisms through which Action Will be Implemented: This project is identified in the CWPP, Local Hazard Mitigation Plan, Cal Fire Nevada-Placer-Yuba Unit Wildfire Protection Plan, and recognized by the Greater Auburn Area Fire Safe Council as a priority project.

Responsible Office: City of Auburn Fire, cooperatively BOR

Priority (H, M, L): High

Cost Estimate: To date approximately $500,000 has been put into the project through grant funding and homeowner costs. This includes initial implementation and maintenance. Average costs per acre have varied from $500 to $9,000. Overall costs will depend on fuels, topography, project enhancement and maintenance. This goes for private lands as well as public lands.

Benefits (Losses Avoided): The values of Auburn properties are approximately $1.8 billion. This does not take into consideration the economic impact a wildfire can have on the community. The natural resources that include recreation and watershed are invaluable.

Potential Funding: Grant funding for both private and public lands. Homeowner's contribution on private lands.

Schedule: This project has achieved significant initial treatment. Areas will continue to be initially treated as well as enhanced. Several areas are ready for a maintenance application. This is an ongoing project that needs constant work in order to remain viable.

7. Residential Home Inspections for Compliance of Fire Safe Standards; Defensible Space.

Issue/Background Statement: The City of Auburn fire department personnel identify one area of residential homes, approximately 30-40, each year and perform on site inspection with the property owner for defensible space and other means to prevent loss due to wildfire. The state of California LE-38 inspection form is used to identify needed actions. The program is based on educating citizens and ongoing worked performed by the homeowner to make the residence fire safe. These inspections occur in the very high fire severity hazard zones and wildland urban interface zones within the City of Auburn.

Existing Planning Mechanisms through which Action Will be Implemented: Do not conduct interaction type programs or inspections and rely on the homeowners to take action with no prompting.

Existing Planning Mechanisms: This project is identified in the CWPP, Local Hazard Mitigation Plan, and is recognized by the Greater Auburn Area Fire Safe Council as a priority project.

Responsible Office: City of Auburn Fire.

Priority (H, M, L): High

Cost Estimate: Currently, all costs are borne through the fire department budget. At an estimated one hour per home inspection at a burdened rate of $100 per hour for an engine company to do the inspection, the cost is $100 per home, for a total of $4,000 per year. Grant funding would allow a greater number of homes to be inspected each year. Possible sources are

National Fire Plan funds or Title III funds from the Secure Rural Schools & Community Self-Determination Act of 2000 (AKA "HR 2389 Timber Tax") payments to Placer County.

Benefits (Losses Avoided): The project reduces potential losses from wildfire. Using an average value of a home in the City of Auburn, based on the Assessor's Roll Values, of $194,551, the value of 30-40 homes is $5.8 million to $7.5 million. The cost of $4000 for inspections represents only approximately .06 percent of the values protected.

Potential Funding: Grants and department budget.

Schedule: This project is anticipated to be implemented each year.

8. Maintenance of the Private Lands Portion of the Shaded Fuel Break Along the Rim of the American River Canyon and the Auburn State Recreation Area (ASRA).

Issue/Background Statement: The completion of the private lands portion (within the City of Auburn) of a multi-jurisdiction shaded fuel break on public/private lands along the interface of the American River Canyon and the City of Auburn, described in its own Recommended Mitigation Action Form, is only useful as long as the vegetation is continually managed.

Other Alternatives: To let the vegetation in the fuel break regrow, this will eliminate the fuel break as a viable project in 5 -10 years.

Existing Planning Mechanisms through which Action Will be Implemented: This project is identified in the CWPP, Local Hazard Mitigation Plan, Cal Fire Nevada-Placer-Yuba Unit Wildfire Protection Plan, and recognized by the Greater Auburn Area Fire Safe Council as a priority project.

Responsible Office: City of Auburn Fire and landowners in the project area.

Priority (H, M, L): High

Cost Estimate: Average costs per acre have varied from $500 to $9,000. Overall costs will depend on fuels, topography, maintenance needed. It is estimated that approximately 40-50 parcels of approximately 60 to 70 acres need annual maintenance. This use of the Placer County Chipper Program and can greatly reduce the maintenance costs.

Benefits (Losses Avoided): Without maintenance, the $1.1 billion in resources protected by the fuel break would again be exposed to a higher risk of wildfire damage and loss.

Potential Funding: Grant funding for ground work, the Placer County Chipper Program, donated labor, homeowner contributions, serve as the basis for this project.

Schedule: Private land maintenance would follow the same schedule as for the Public lands within the project area. Depending on fuels, topography, and vegetation growth, complete maintenance is required every 2 to 3 years to keep the integrity of the project.

9. Implementation of Storm Water Treatment Plan.

Issue/Background: The City of Auburn Public Works Department adopted an ordinance imposing limitations and procedures regarding storm water treatment and incidents affecting storm water run-off facilities. This was a mandated program by the Federal EPA. The plan was assembled and approved according to EPA recommendations.

Other Alternatives: Do not impose additional safety measures in such areas. Failure to comply with Federal mandate.

Existing Planning Mechanisms through which Action Will be Implemented:

Responsible Office: City of Auburn, Public Works Director

Priority (H, M, L): High

Cost Estimate: Undergoing analysis of projected costs to implement all phases of the program. It is estimated that approximately $100,000 each year is required to fully implement the plan for successful results.

Benefits (Losses Avoided): Reduction of natural and environmental hazards to waterways and areas within the City and surrounding regional waterways.

Potential Funding: Grant funding can provide a valuable source of funding for this program

Schedule: Plan completed, implementation phase in progress.

10. Electric Street Diversion Project

Issue/Background: The City of Auburn Public Works Department is in process of developing and implementing a project to assist with the diversion of storm water run-off to alternate locations. This diversion project consists of infrastructure in place to reduce run-off to the historical section of Auburn causing potential flood related damages.

Other Alternatives: Do not conduct project. Continue damage repair when occurs.

Existing Planning Mechanisms through which Action Will be Implemented:

Responsible Office: City of Auburn, Public Works Director

Priority (H, M, L): High

Cost Estimate: This project is estimated at approximately $2,000,000

Benefits (Losses Avoided): Reduction of flood related damage to historical buildings in Auburn. It is estimated that this project can eliminate up to $15,000,000 worth of damage from a storm system with significant rainfall.

Potential Funding: There is no funding dedicated for this project, all funding will come from general funding and generated sources. Grant funding can provide a valuable source of funding for this program.

Schedule: Identification of project only at this time. Awaiting funding source.

11. Old Town Auburn Storm Drain System

Issue/Background: The storm drain system under the historic section of Old Town Auburn is comprised of a number of tunnels and channels directing run-off water to a local waterway. Most all this system is directly under historic buildings of the town. Several sections of the system are original and dating back to as many as 100 years. Significant rainfall can cause temporary flooding and cause erosion to this older drainage system. The system itself needs to be evaluated for future repair/replacement, or other in an effort to eliminate potential flooding which can result in the loss of historical buildings.

Other Alternatives: Do not evaluate system.

Existing Planning Mechanisms through which Action Will be Implemented:

Responsible Office: City of Auburn, Public Works Director

Priority (H, M, L): High

Cost Estimate: It is estimated that $50,000 is required to conduct a full assessment and develop a plan that would identify required mitigation measures. It would be anticipated this assessment and plan development would provide mitigation/preparation in the event of a 100-year flood event.

Benefits (Losses Avoided): Reduction of flood related damage to historical buildings in Auburn. It is estimated that this project can eliminate up to $500,000 worth of damage from a storm system with significant rainfall.

Potential Funding: No funding is available for such a project.

Schedule: It is undetermined at this time the cost benefit. It would be anticipated that such an assessment would identify such benefit.